

-40-

## CLAIMS

1. An image forming apparatus for forming an image  
on a recording medium by ejecting drops of recording fluid  
5 from a recording head, comprising:

a waste tank having a space for containing waste fluid;  
obtaining means for obtaining a correlation value that  
has a correlation to a deposited state of the waste fluid in  
the space within the waste tank; and

10 judging means for judging whether or not the correlation  
value exceeds a reference value.

2. The image forming apparatus as claimed in claim  
1, wherein the obtaining means obtains the correlation value  
15 from a number of times a recovery process is carried out to  
eject from the recording head recording fluid that does not  
contribute to image formation.

3. The image forming apparatus as claimed in claim  
20 1 or 2, wherein the waste tank includes an absorbing member  
for absorbing and holding the waste fluid, and detection means  
for detecting a fully absorbed state of the absorbing member.

4. The image forming apparatus as claimed in claim  
25 3, wherein a volume ratio of the space and the absorbing

-41-

member within the waste tank is in a range of 1:4 to 3:2,

5           5. The image forming apparatus as claimed in any  
of claims 1 to 4, wherein the reference value is changed based  
on a recovery process frequency at which the recovery process  
is carried out.

6. The image forming apparatus as claimed in claim  
5, wherein the recovery process frequency is obtained based on  
10 a total number of recovery processes carried out during a  
total used time of the waste tank.

7. The image forming apparatus as claimed in any  
of claims 1 to 4, wherein the reference value is constant.  
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8. The image forming apparatus as claimed in any  
of claims 1 to 7, wherein the correlation value is corrected  
depending on an environment condition.

20           9. The image forming apparatus as claimed in any  
of claims 1 to 8, wherein a usable state of the image forming  
apparatus is limited when the correlation value exceeds the  
reference value.

25           10. The image forming apparatus as claimed in any

-42-

of claims 1 to 9, wherein the recording fluid includes a water-dispersible coloring agent, a wetting agent and a penetrating agent, and has a viscosity increase rate due to moisture evaporation that is 1.0 or less up to a moisture evaporation rate of 30% with respect to a total weight of the recording fluid and is 50 or greater for moisture evaporation rates of higher than 30% and less than or equal to 45%.

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